Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended	)	**WT Docket No. 99-87**
	)	
	)	
Promotion of Spectrum Efficient Technologies on Certain Part 90 Frequencies	)	**RM-9332**

COMMENTS OF TAIT NORTH AMERICA, INC. IN RESPONSE TO SECOND FURTHER NOTICE OF PROPOSED RULEMAKING

Tait North America, Inc. (TAIT), a manufacturer of high-quality telecommunications products, including mobile and portable communications products and network infrastructure solutions for the VHF and UHF land mobile services, hereby respectfully submits its comments in response to the *Second Further Notice of Proposed Rule Making* (the Notice). [1] The Notice was published in the Federal Register on July 17, 2003, and therefore these comments are timely filed. For its comments, TAIT states as follows:

1. The Notice in this proceeding seeks comment on whether the Commission's equipment authorization (Certification) provisions in the current rules are sufficient to promote migration of licensees to one voice path per 6.25 kHz bandwidth, or equivalent technology, or whether migration to 6.25 kHz bandwidth or equivalent technology by licensees should be mandatory.

[1] *Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended, Promotion of Spectrum Efficient Technologies on Certain Part 90 Frequencies*, FCC 03-34, 68 Fed. Reg. 18054, released February 25, 2003.

2. The Commission concluded in the *Second Report and Order* in this proceeding, which was consolidated with the instant Notice, that the equipment authorization rules adopted in the Refarming proceeding, PR Docket No. 92-235, did not trigger a sufficiently fast pace of migration to narrowband technologies, and that some additional incentives were required. However, the Commission's Second R&O in this proceeding diverges in certain important respects from its June 23, 1995 *Report and Order and Further Notice of Proposed Rule Making* in the "Refarming" Proceeding, 10 FCC Rcd. 10076, in which the Commission decided to rely solely on equipment authorization procedures in order to encourage narrowband conversion in the crowded VHF and UHF land mobile bands. In that proceeding, among other things, the Commission held that, by January 1, 2005, "new type accepted equipment must be designed to operate on channels of 6.25 kHz or less or on channels up to 25 kHz if the narrowband efficiency standard is met" (multi-mode equipment that operates on 25 kHz and/or 12.5 kHz channels will be allowed if it is also capable of meeting the efficiency standard of one voice channel per 6.25 kHz of channel bandwidth). This was implemented in the rules at Section 90.203(j)(4)-(5). Equipment manufactured and sold by TAIT will meet these standards at the times specified in the cited rule section.

3. The Commission, in 1995, adopted a specific rationale for its reasonable reliance on equipment authorization rather than mandatory licensee conversion deadlines. It stated, at paragraph 37 of the 1995 Report and Order in the Refarming proceeding that:

> The discussion regarding channelization has been dominated by concerns regarding time frames for introducing narrowband technology. The comments generally discuss extended schedules, e.g. 26 years in the User Coalition plan. Most of these time frames conservatively favor full amortization of equipment, and assume unnecessarily long lead times for development and marketing of new narrowband technologies. We have

> decided to adopt a plan that provides a flexible framework within a much shorter period of time by which market based incentives can be introduced into these private wireless bands. In contrast to many comments and the User Coalition plan, we have decided not to implement a comprehensive set of dates mandating strict manufacturing and licensing requirements. Rather, we conclude that the best approach is to specify type acceptance dates to guide the transition process. Recognizing that there is over $25 billion in equipment investment in these PLMR bands, we will provide users immediate flexibility in equipment decisions and provide a period for the development of new technologies. This transition plan provides users the option of continuing to use existing equipment, transitioning immediately to more efficient narrowband equipment, or waiting until a full line of affordable narrowband equipment is available and costs become competitive, before changing out their systems. This, this plan allows each licensee the freedom to choose equipment and a transition schedule that best fulfills their needs while balancing technical capabilities and financial considerations…

This rationale was reasonable at the time it was adopted, and, TAIT would argue, is reasonable now. There has not been sufficient time to permit this market-based, flexible approach to narrowband implementation to take full effect, especially with respect to 6.25 kHz channelization. As the result, any mandatory conversion to 6.25 kHz technology, which essentially abandons the Commission's flexible approach in favor of a "command and control" approach to spectrum efficiency, is unreasonable, and premature.

4. In the Second Report and Order in this proceeding, the Commission amended its rules to impose a deadline of January 1, 2013 for mandatory migration to 12.5 kHz technology for non-public safety licensees, and a deadline of January 1, 2018 for public safety licensees.[2] This action was met with a flurry of petitions for reconsideration, including that filed by TAIT. While those petitions are pending, it is apparent from the plethora of views concerning the basic philosophy of mandatory narrowband conversion by licensees, and, if such is to occur, what the proper timetable for such should be, that

[2] TAIT timely filed on August 18, 2003 a Petition for Reconsideration relative to this requirement, which is presently pending.

(1) the Commission has not arrived at the proper approach to 12.5 kHz technology, and (2) that such should be revisited. Given that the timetable for 12.5 kHz conversion is uncertain and is under any circumstances far into the future, any determination of a mandatory deadline for 6.25 kHz conversion is purely speculative, and on its face arbitrary. In the Further Notice of Proposed Rule Making in this proceeding, even though the Commission did not address 6.25 kHz conversion, commenters addressed it anyway, and most of those comments were opposed to any mandatory conversion deadline. Even PCIA, which suggested a mandatory deadline, acknowledged that it would have to be revisited to take into account circumstances years hence. If that is the case, there appears no point in establishing a "placeholder" deadline for conversion to 6.25 kHz by licensees.

5. The Commission's sole rationale for considering a mandatory 6.25 kHz conversion by licensees is that it decided to require conversion to 12.5 kHz in this proceeding by a date certain, and that 12.5 kHz has been, since the Refarming proceeding, viewed as a transitional standard which would facilitate conversion to 6.25 kHz. TAIT would argue that 12.5 kHz migration, and the equipment authorization rules mandating that 12.5 kHz equipment be available by a time certain was not merely a means to a 6.25 kHz end, but a means of achieving the benefits of narrowband conversion in the short run. The standard was created at a time when 6.25 kHz bandwidth devices were not reasonably available, and the technology was not firm enough to depend on a one-step conversion to 6.25 kHz. However, the burden to licensees of a two-step narrowband conversion procedure premised on equipment authorization requirements is far less than, and qualitatively different from, a two-step narrowband procedure premised on mandatory licensee conversion. The former merely requires that equipment become

available for use when licensees are changing out equipment in the normal course of budgeting and amortization; the latter requires that licensees change out equipment twice.

6. There are numerous factors that will affect the conversion to 6.25 kHz at some time after 2018, for example, at which time public safety entities are (pursuant to the Second Report and Order) required to convert to 12.5 kHz channel bandwidths. Given that public safety entities do not have to convert to 12.5 kHz until that date, the establishment now of a mandatory conversion date to 6.25 kHz would be highly premature. It would have to take into account the amortization of the 12.5 kHz equipment purchased by public safety entities as late as 2018. Applying the same timetables that the Commission adopted for 12.5 kHz conversion, public safety licensees would be afforded another 15 years, until 2033, to convert to 6.25 kHz channel bandwidth. There are so many factors that would change between now and that date, that acting now to create a deadline for 6.25 kHz channel bandwidth conversion by licensees simply makes no sense. By that time, dynamic frequency and emission selection using software defined radios, or other technologies might surpass narrowband technologies in addressing spectrum shortfall in any case. Mandating narrowband conversion as far in the future as the Commission would have to do to insure across-the-board conversion would actually restrict the development and implementation of new, spectrum-efficient technology.

7. For these reasons, TAIT urges that the Commission not take any steps toward mandatory licensee migration to 6.25 kHz channel bandwidth at this time.

Respectfully submitted,

TAIT NORTH AMERICA, INC.

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